

BUSINESS IN NEBRASKA

Prepared by the Bureau of Business Research, 200 College of Business Administration, University of Nebraska, Lincoln, NE 68588-0406, 402/472-2334

THE FARM CREDIT CRISIS: WILL IT HURT THE WHOLE ECONOMY?

Some economists estimate that 5 percent or more of all farms currently in business will go into bankruptcy in 1986, and that one-farm in seven will fail within the next four years. A recent study by two agricultural economists estimates that farm lenders may write off as much as \$50 billion in bad farm debt over the next four years, with \$20 billion cited as the "most probable" loss estimate. (11,4,6)

Such projections of losses on farm loans may be high. Nevertheless, actual losses to date already have been large enough to cause a substantial increase in the failure rate among agricultural banks. Accounting for 22 percent of bank failures between 1981 and 1983, agricultural banks have made up about two-thirds of all failed banks since July 1984; 62 agricultural banks failed during 1985. Moreover, the Farm Credit System, a group of federally sponsored agencies that lends to farmers, announced this fall that it will need direct assistance from the federal government to stay in operation. (9,1)

Ordinarily, the failure of some farmers and some farm lenders need not attract more attention than we currently pay to the thousands of business firms that fail each year. For several reasons, however, the current farm debt situation has attracted special attention. First, projections of large losses concentrated in agriculture have created concern about the economic health of the entire industry. Moreover, the farm credit crisis has developed at a time when loan losses of commercial banks already are relatively high. Finally, the apparent vulnerability of the banking system to the farm credit crisis has increased public concern about the continued viability of many banks that have been heavily committed to agricultural lending. (14)

Some economists further believe that problems in the farm sector will spill over into the rest of the economy, causing slower economic growth and lower employment. One recent study suggested that bank failures resulting from losses on farm loans could cause investors to view investments in all privately issued securities as more risky. Consequently, interest rates on all privately issued securities could rise relative to the interest rates on U.S. Treasury securities, causing a slowing in economic growth. This article discusses reasons for thinking that this effect either will not occur or will be relatively insignificant. (11,3)

If the failure of large numbers of farms affects both interest rates and general economic activity adversely, then assisting the agricultural sector of the economy may make sense over and above the usual rationale based on the social benefits of maintain-

ing the family farm. The magnitude of federal aid necessary to keep farm lenders viable, however, has been estimated to be in the "multi-billions" of dollars for the Farm Credit System alone. In light of current efforts to reduce the federal budget deficit, it seems prudent to assess the likelihood that the current financial problems of the farm sector will affect the whole economy adversely.

This article analyzes the influences of the current farm credit crisis on the economy in two ways. The first approach examines the performance of financial markets and the economy in recent years. Since the financial trouble of farmers became widespread after the average price of farmland started declining in 1981, we might expect to observe some adverse effects on the economy already. The second approach examines the effects of the farm financial crisis of the 1920s on the economic activity of that period.

THE ORIGIN AND EFFECTS OF THE CURRENT FARM CREDIT CRISIS

Today's farm crisis developed as a result of the rapid increases in the prices of farmland in the 1970s through 1981 and the subsequent declines in land prices since then. The 1970s and early 1980s were years of rapid inflation. From 1972 through 1981, the GNP deflator rose at an 8.1 percent average annual rate, while the CPI rose at a 9 percent average rate. The price of farmland rose even more rapidly; the average price of an acre of farm real estate rose at a 14.4 percent annual rate from 1972 to 1981.

Total farm debt rose in step with the rise in the prices of farmland. Movements in land prices and farm debt over this period were closely related for two reasons. First, many farmers who bought land while land prices were rising borrowed heavily to finance their purchases. Second, the rising land prices enabled farmers to pledge their land as collateral for general purpose loans.

Unfortunately for farmers, prices of farm commodities did not rise as fast as farmland prices. From 1972 through 1981, an index of prices received by farmers on all farm products rose at an 8.1 percent rate, equal to the general inflation index. Furthermore, most of the rise in the index of farm prices over these years was concentrated in 1973-74 and 1978-79. Prices received by farmers have not risen as rapidly as the GNP deflator since 1979. Thus,

(continued on page 2)

(continued from page 1)

during the years of rapid inflation, the price of farmland rose substantially faster than prices received by farmers for their output.

The general rate of inflation slowed sharply after 1981, making farmland ownership less valuable as an inflation hedge. In addition, the price of farm output relative to nonfarm prices has declined by 1.8 percent since 1981. For many farmers who borrowed heavily during the period of rapid increases in the price of farmland, prices received for farm products have not been high enough to cover their operating expenses and meet their loan payments. Consequently, farm lenders have begun incurring losses on the loans on which farmers have defaulted, and the protection of collateral for farm lenders has been eroded by falling farmland prices.

ONLY A MINORITY OF FARMERS HAVE FINANCIAL PROBLEMS

The "farm credit crisis" is concentrated primarily among a minority of the family-size commercial farms, which have annual sales of farm output between \$50,000 and \$500,000. About two-thirds of the family-size commercial farms have ratios of debt to assets below 40 percent; the USDA considers these farms to have no apparent financial problems. Moreover, these farms account for less than 30 percent of the debt held by medium-size farms. In contrast, about 14 percent of family-size commercial farms have debt-to-assets ratios of 70 percent or higher, and these account for over 30 percent of the debt. In total, about one-third of family-size commercial farms holds more than 70 percent of this farm category's debt and has debt-to-assets ratios that indicate some financial stress. It is this minority of farmers--and their lenders--who account for the problem debt. (2)

HAS THE FARM CREDIT PROBLEM AFFECTED THE ECONOMY IN RECENT YEARS?

The spread between the interest rates on commercial paper and Treasury bills--one measure of the spread between interest rates on private and public debt--appears to reflect a risk premium on privately issued debt. The spread was largest from 1980 through 1982, in recent history, which was essentially one continuous period of economic recession. This rate spread also widened for a few months around the time of the financial crisis at the Continental Illinois National Bank in May 1984, perhaps reflecting investors' concern about the possible consequences of failure by Continental Illinois.

There is little evidence, however, that the growing farm credit crisis since 1981 has had adverse effects on the economy. Real economic activity has been rising since late 1982. Moreover, the spread between the commercial paper rate and the Treasury bill rate generally has narrowed following the sharp rise in the failure rate among agricultural banks that began in the second half of 1984. In fact, since mid-1984, the spread between interest rates on private and public debt instruments of similar maturity has been as low as at any period since 1978. Thus, while this rate spread reflects a risk premium, the risk premium does not appear to be significantly correlated with problems in agriculture as suggested by studies warning of a general financial crisis.

ECONOMIC EFFECTS OF THE FARM FINANCIAL CRISIS IN THE 1920s

Since history frequently repeats itself, we may learn something by looking back to similar problems in an earlier era. The agricultural sector of the U.S. economy experienced a financial crisis during the 1920s that was similar in many respects to farmers' and farm lenders' current financial problems. To make this experience relevant for an analysis of the 1980s, we first examine some of the important similarities and differences between the farm crises of the 1920s and 1980s.

U.S. AGRICULTURE BEFORE WORLD WAR I

Agriculture accounted for much larger shares of employment and output in the U.S. economy before World War I than in the 1980s. In 1900, for example, about 41 percent of total employment was in the farm sector. The share of the labor force on farms was declining, falling to just under 30 percent by 1913. In contrast, the farm sector accounted for only 3 percent of civilian employment in 1981, the year of the recent peak in farmland prices. (14)

During the five years ending in 1901, the dollar value of farm output accounted for 23.5 percent of gross private domestic product. By the five years ending in 1921, that percentage declined to 14.5 percent. In contrast, farm output accounted for about 3 percent of gross private domestic product in 1981. These contrasts suggest that adverse developments in the farm sector should have had larger effects on the economy before World War I than in the 1980s.

The farm sector was the major export sector of the U.S. economy before the war, with farm exports accounting for 65 percent of the dollar value of all U.S. exports in 1901. That share of total exports declined gradually to 46 percent in 1913, but rose again to 48 percent in 1920. In 1981, agriculture products accounted for 18.6 percent of U.S. merchandise exports.

THE GROWING IMPORTANCE OF CREDIT FOR AGRICULTURE

Several developments made the availability of credit more important for farmers by the late 1800s than it had been in earlier U.S. history. In the early 1800s, homesteaders could obtain land and become farmers relatively cheaply. By the late 1800s, new farmers had to buy land from other landowners. Farming also became more capital-intensive as specialized machinery and buildings made farm operations more efficient.

Prior to World War I, farm mortgage credit was available from commercial banks, life insurance companies, individuals and others. The category of "individuals and others," which accounted for 75 percent of farm mortgage credit in 1910, included the farm mortgage loan companies that began operating in the late 1800s. Mortgage loan companies generally were funded by investors in the eastern states. These companies employed agents who worked in farm communities, accepted mortgage loan applications from farmers, and transmitted the loan applications to the mortgage companies for approval. (5,10)

(continued on page 3)

(continued from page 2)

Most farm mortgage loans had maturities of three to five years. Maturities of farm mortgage loans tended to be shortest at commercial banks; about half of these loans had maturities of one year or less. Shorter loan maturities made farmers more vulnerable to foreclosure by creditors. Although a farmer experiencing temporary financial distress ordinarily might be able to meet the payments on an outstanding mortgage loan, lenders might not renew the mortgage loan if it matured while a farmer was having a financial problem. (5,8,12,10)

Farmers turned their complaints about the terms of credit available to them into an important political issue by the early 1900s. Political initiatives by farmers resulted in the passage of the Federal Farm Loan Act of 1916, which established the Farm Credit Banks under the ownership and supervision of the federal government. That act also facilitated the development of joint-stock land banks, which were privately owned and managed firms that operated under the supervision of the federal government. These two categories of federally supervised lending institutions made most of their farm mortgage loans with maturities of 33 to 35 years. Federal Land Banks and the joint-stock land banks did not become major farm lenders until the 1920s. (10)

WORLD WAR I AND THE FARM FINANCIAL CRISIS OF THE 1920s

The farm financial crisis of the 1920s resulted from the response of the U.S. agricultural sector to the disruption to agricultural production that occurred in Western Europe during World War I. The nations of Western Europe increased their agricultural imports to replace lost production. This caused the dollar value of U.S. farm exports to rise sharply during the war and shortly thereafter. Prices of farm products and farmland rose sharply during these periods in response to the increase in foreign demand for U.S. farm products.

Farmers borrowed substantially during the war to buy land that was rising rapidly in value and to spend more on non-land inputs to expand production. Farm mortgage debt increased from \$4.7 billion on January 1, 1914 to \$10.2 billion on January 1, 1921. Non-real estate farm loans at commercial banks rose from \$1.6 billion to \$3.9 billion over the same period.

U.S. farm exports declined after the war, as farms in Western Europe resumed production. The decline in export demand for U.S. farm products contributed to a reduction in farm prices relative to prices of industrial commodities. This ratio of farm to nonfarm prices peaked in 1920, then declined sharply in 1921. The average price of farmland continued to rise through 1920, then declined in each subsequent year through 1928.

Declines in the prices of farm output and the value of farmland drove many farmers into bankruptcy and many agricultural banks into failure. From 1921 through 1929, an average of 635 banks failed per year, compared with an average of 88 bank failures per year over the previous 20 years.

Comparisons of the declines in prices of farm commodities and land in the 1920s with those of the 1980s show declines much more severe than what has been observed so far in the 1980s. First, the relative price of farm output declined more in the 1920s than in the 1980s. Second, there were sharper declines in

farmland prices, the collateral base for farm debt, after 1920 than after 1981. Other things equal, these declines would have had much greater effects on the ability of farmers to secure new term debt or sustain old debt in the 1920s. Finally, with shorter maturities on most of the farm mortgage credit in the 1920s, the declines in farm prices and land values made farmers more vulnerable to foreclosure then than now. (10)

ECONOMIC ADJUSTMENTS TO THE FARM FINANCIAL CRISIS OF THE 1920s: IMPLICATIONS FOR THE 1980s?

As noted previously, agriculture's larger share of total output in the 1920s implies that problems in the farm sector would have had larger adverse effects on GNP and employment in the 1920s than in the 1980s. Yet the 1920s were years of general economic prosperity. Real GNP rose at a 4.2 percent annual rate from 1920 through 1929, up from an average of 3 percent annual growth over the prior 20 years. The number of persons employed grew at a 1.8 percent rate from 1920 through 1929, about the same rate as over the prior 20 years. Although general economic growth might have been even stronger without agriculture's problems, the actual economic performance certainly meets or exceeds most historical norms.

Declines in the prices of farm output and farmland in the 1920s also had relatively small effects on economic activity in the farm sector. Although farm output fell sharply in 1921, the index of overall farm output had regained its previous peak by 1925. Farm output rose at a 1.4 percent annual rate from 1925 through 1929, while real GNP rose at a 3.2 percent rate. Total employment in the farm sector essentially was unchanged in the 1920s; the growth of employment occurred in the nonfarm sector.

How could such a severe deflation in the farm sector, with widespread farm bankruptcies, have such small effects on farm output? The answer involves the process of bankruptcy in our capitalistic economic system. When farmers go bankrupt, their land and equipment do not go out of production; these resources instead are sold to other farmers at reduced prices. It is the lower prices that make it profitable for other farmers to buy the land and equipment even though prices for farm output are lower. Thus, through the process of bankruptcy, farm assets are repriced to levels low enough to make their continued use profitable for farmers.

Finally, if higher bank failure rates cause an increase in risk premiums on privately issued debt, this effect also should have been stronger in the 1920s than in the 1980s, especially since federal deposit insurance did not exist then. Despite the large number of bank failures during the 1920s, however, the spread between the commercial paper rate and the yield on short term Treasury securities did not widen during that decade. Thus, the financial distress in the ag sector of the economy did not seem to produce an increase in risk premiums on privately issued debt.

INDIVIDUAL BANK FAILURES VS. THE LIQUIDITY OF THE BANKING SYSTEM

The primary reason that the bank failures had such little influence on overall economic activity in the 1920s was that the

(continued on page 6)

Review and Outlook

The Nebraska composite index of leading economic indicators has been updated recently. Other data series have been tested as possible additions to, or replacements for, the original component indicators. As a result, the number of residential dwelling units under new contract has replaced the value of residential construction in the composite leading index. Other weighting schemes were tried, but equal weighting of component indicators was retained. Data revisions to component indicator series have been incorporated, and new seasonal factors have been computed using data through December 1985. Historically, the composite leading index has changed very little, except 1984 and 1985 data.

As illustrated in Figure 1, the Nebraska composite index of leading economic indicators increased sharply from October

through December 1985. The more modest January gain in the leading index was due primarily to a large decline in seasonally adjusted initial claims for unemployment insurance and a rise in the number of residential dwelling units under new contract. The stock price index rose only slightly, while the index of prices received by Nebraska farmers for all agricultural products and average weekly earnings in manufacturing dropped. The recent upturns in the leading index signal improvement in the Nebraska economy in the near term. Table 6 presents the percent changes in the component indicators of the leading index for the past several months and February projections.

A considerable increase in real output for the agriculture component of the Nebraska economy was responsible for the

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES				
1. CHANGE FROM PREVIOUS YEAR				
December 1985	Current Month as Percent of Same Month Previous Year		1985 to date as percent of 1984 to date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	109.4	106.3	105.9	106.7
Agricultural	140.7	114.7	112.3	101.2
Nonagricultural	104.8	106.1	105.0	106.8
Construction	89.5	114.2	93.7	110.0
Manufacturing	97.2	99.7	99.4	100.0
Distributive	107.2	107.5	105.7	109.2
Government	108.7	107.6	113.4	106.2
Physical Volume	108.2	103.2	104.7	103.8
Agricultural	149.5	121.0	125.3	112.3
Nonagricultural	101.4	102.6	101.4	103.5
Construction	87.8	111.9	91.1	106.9
Manufacturing	97.0	99.0	99.7	99.6
Distributive	103.4	103.6	102.0	105.4
Government	103.2	102.7	104.2	101.9
2. December 1985 CHANGE FROM 1967				
Percent of 1967 Average				
Indicator	Nebraska		U.S.	
Dollar Volume	401.0		466.6	
Agricultural	496.6		403.6	
Nonagricultural	386.3		468.6	
Construction	243.7		471.4	
Manufacturing	352.1		322.1	
Distributive	402.2		549.9	
Government	441.9		469.3	
Physical Volume	137.3		152.4	
Agricultural	206.1		168.2	
Nonagricultural	126.8		151.9	
Construction	67.9		131.3	
Manufacturing	140.7		125.7	
Distributive	122.8		168.0	
Government	154.8		153.7	

5. PRICE INDEXES December 1985			
	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	327.4	103.8	103.6
Commodity component	289.9	102.5	102.1
Wholesale Prices	310.2	100.1	99.5
Agricultural Prices			
United States	240.6	94.9	90.2
Nebraska	241.0	94.1	90.0
*Using arithmetic average of monthly indexes.			
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.			

Table 4 and the City Business Indicators bar chart are omitted, as county employment statistics are not available.

3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES

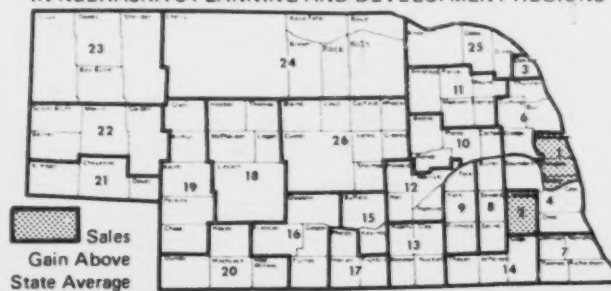
December 1985 Region Number ¹ and City	City Sales ²	Sales in Region ²	
	Dec. 1985 as percent of Dec. 1984	Dec. 1985 as percent of Dec. 1984	1985 to date as percent of 1984 to date
<i>The State</i>	107.8	107.7	100.4
1 Omaha	114.9	114.5	106.0
Bellevue	108.6		
Blair	107.1		
2 Lincoln	111.7	111.2	104.4
3 So. Sioux City	97.9	96.0	99.3
4 Nebraska City	105.2	114.4	98.1
6 Fremont	104.8	103.5	96.0
West Point	109.8		
7 Falls City	92.9	99.5	95.5
8 Seward	115.2	120.6	96.3
9 York	122.4	116.4	95.6
10 Columbus	106.5	112.0	93.3
11 Norfolk	113.1	107.9	95.2
Wayne	103.3		
12 Grand Island	99.8	104.4	95.4
13 Hastings	104.3	105.2	92.5
14 Beatrice	113.5	109.6	97.9
Fairbury	106.7		
15 Kearney	99.8	102.7	94.7
16 Lexington	116.8	102.5	91.2
17 Holdrege	91.7	95.5	88.8
18 North Platte	112.4	110.0	94.4
19 Ogallala	92.3	92.9	91.6
20 McCook	105.8	101.6	95.1
21 Sidney	116.1	105.0	98.9
Kimball	97.9		
22 Scottsbluff/Gering	103.5	100.7	99.4
23 Alliance	99.0	111.1	99.3
Chadron	159.4		
24 O'Neill	101.2	102.1	92.5
25 Hartington	84.9	103.3	93.2
26 Broken Bow	101.3	101.9	93.0

¹See region map below.

²Sales on which sales taxes are collected by retailers located in the state. Region totals include motor vehicle sales; city totals exclude motor vehicle sales.

Compiled from data provided by Nebraska Department of Revenue.

1985 YEAR TO DATE AS PERCENT OF 1984 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

December 1985 rise in the Bureau of Business Research's physical volume index. On a monthly basis, total economic activity swelled 3.1 percent during December, the second consecutive monthly gain. Agriculture output expanded 11.9 percent, while the level of nonagriculture activity contracted 0.6 percent.

Compared to agriculture's growth in real output, the nonfarm sectors of the state economy performed unfavorably. The level of construction activity declined sharply, with December 1985 output dropping 6.0 percent, after falling 5.9 percent the previous month. December manufacturing output decreased 3.8 percent, and output for government declined 0.1 percent. The distributive sector registered the sole monthly increase in nonfarm economic activity of 0.8 percent.

On a seasonally adjusted basis, Nebraska cash receipts for farm marketings increased \$87.9 million during December 1985 and

were up \$319.9 million from December 1984 receipts, an increase of 45.8 percent. Nebraska's index of agriculture prices received swelled 0.4 percent from the index value of the previous month during December, but dropped 5.9 percent from the December 1984 index level. During December, the U.S. index of farm prices received was up 0.9 percent, but has declined 5.1 percent since December 1984.

Compared to December 1984 sales, Nebraska total dollar volume net taxable retail sales increased 7.7 percent during December 1985. The growth in total retail sales was due to gains in both vehicle and nonvehicle sales. When adjusted for price changes, total sales rose 5.2 percent during December. The strength in December retail sales is illustrated further by Chart 1 and Table 3, with 23 of the 32 listed cities registering net taxable sales above the level of December 1984 sales.

CHARLES L. BARE

TABLE 6
Percentage Changes* in Seasonally Adjusted Component Indicators
of the Nebraska Composite Index of Leading Economic Indicators

Component Indicators	November 1985	December 1985	January 1986	February 1986***
Initial claims for unemployment insurance (inverted)**	+1.5	+9.9	+7.0	+3.4
Nebraska Department of Labor				
Number of residential dwelling units--new construction contracts**	+18.5	+31.8	+16.2	-12.2
F.W. Dodge of McGraw Hill				
500 common stocks	+5.9	+4.8	+0.4	+4.7
Standard and Poor's Corporation				
Prices received for all farm products	+3.8	-1.9	-2.6	-8.0
Nebraska Crop and Livestock Reporting Service				
Average weekly earnings in manufacturing	+1.5	-1.0	-1.2	+2.6
Nebraska Department of Labor				

*Percentage changes are computed to assure symmetrical treatment of positive and negative changes in the component indicators.

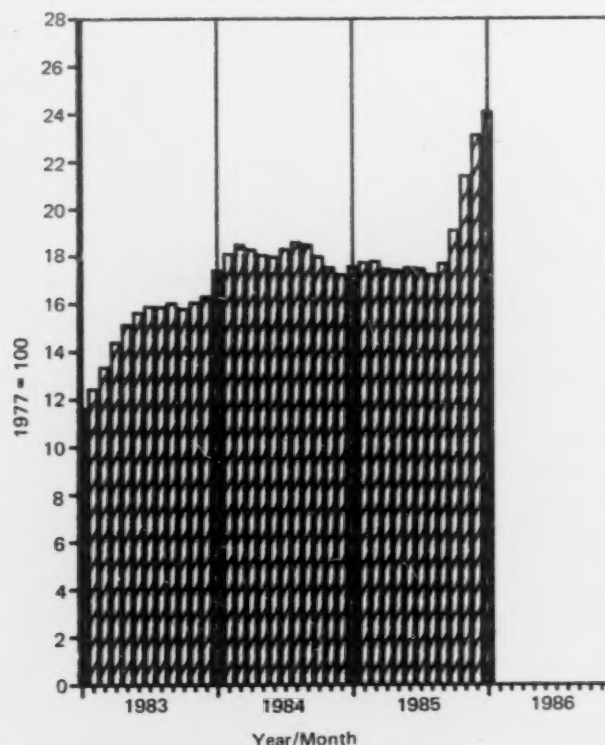
**Claims and dwelling units are smoothed using an unweighted 3 month moving average. Percentage changes in claims are inverted by multiplying by -1.

***Projected.

CHART 1
City Nonvehicle Retail Sales Percentage Change
December 1985 compared to December 1984



FIGURE 1
Nebraska Composite Leading Index



(continued from page 3)

money supply grew fast enough to support growth in economic activity and to forestall liquidity problems in the banking system as a whole. Deposits in the many failed banks were simply transferred to solvent banks, with no overall reduction in the money stock. Because the quantity of money is closely related to aggregate spending and economic activity, the growth in the money stock facilitated growth in overall economic activity. Although the money supply dropped sharply in 1921, during a recession after World War I, M1 (demand deposits plus currency) rose at about a 3 percent annual rate from June 1921 to June 1929. This increase facilitated the economic growth that occurred over that period, in sharp contrast to the beginning of the Great Depression (1930-1933), which saw the money stock decline at an 11 percent annual rate. (7)

CONCLUSIONS

Many farmers with high ratios of debt to assets will go bankrupt unless they receive large government subsidies. Some economists have warned that rising farm bankruptcies will cause the failure of many farm banks and possibly the Farm Credit System. Others even have suggested that farm loan losses are likely to produce a genuine financial crisis unless federal aid is provided.

The evidence presented in this article does not support the argument that the farm financial crisis will adversely affect the entire economy. The financial problems of many farmers have become serious since 1981 primarily because the average price of farmland has declined. The financial problems of farmers, however, have not increased the relative interest rates on all privately issued debt or slowed the growth of total output. Evidence from the 1920s, a period of similar crisis in the farm sector, indicates that the farm financial crisis of that decade also had no adverse effects on the interest rates on privately issued debt or on overall economic growth. If we want to rationalize government support for farmers with high debt-to-assets ratios, such support should be sought on other grounds.

MICHAEL T. BELONGIA
R. ALTON GILBERT

REFERENCES

- 1 Belongia, Michael T. and Kenneth C. Carraro. "The Status of Farm Lenders: An Assessment of Eighth District and National Trends," *Review*, Federal Reserve Bank of St. Louis (October 1985).
- 2 Bullock, J. Bruce. "Farm Credit Situation: Implications for Agricultural Policy," FAPRI No. 4-85 (Food and Agricultural Policy Research Institute, March 1985).
- 3 Chase Econometrics. "Economic Impacts of a Farm Credit System Default," report to the Farm Credit Council, October 1985.
- 4 Drabenstott, Mark, and Marvin Duncan. "Agriculture's Bleak Outlook," *New York Times*, August 14, 1985.
- 5 Eichengreen, Barry. "Mortgage Interest Rates in the Populist Era," *American Economic Review* (December 1984).
- 6 "The Farm Slide," *Christian Science Monitor*, August 20, 1985.
- 7 Friedman, Milton, and Anna J. Schwartz. *A Monetary History of the United States, 1867-1960* (Princeton University Press, 1963).
- 8 Higgs, Robert. *The Transformation of the American Economy, 1865-1914* (John Wiley and Sons, 1971).
- 9 Karr, Albert R., and Charles F. McCoy. "Farm Credit Will Need Massive U.S. Aid in 18 to 24 Months, Chief Regulator Says," *Wall Street Journal*, September 6, 1985.
- 10 Olsen, Nils A. et al. "Farm Credit, Farm Insurance, and Farm Taxation," *Agriculture Yearbook 1924* (U.S. Department of Agriculture, 1925).
- 11 Schink, George R., and John M. Urbanchuk. "Economy-Wide Impacts of Agricultural Sector Loan Losses," Wharton Econometric Forecasting Associates, July 1985.
- 12 Stock, James H. "Real Estate Mortgages, Foreclosures, and the Midwestern Agrarian Unrest, 1865-1920," *Journal of Economic History* (March 1984).
- 13 U.S. Department of Agriculture, Economic Research Service. *The Current Financial Condition of Farmers and Farm Lenders*, Agricultural Information Bulletin No. 490, March 1985.
- 14 U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States* (U.S. Government Printing Office, 1985).
- 15 *Historical Statistics of the United States* (GPO, 1975).

Michael T. Belongia is a senior economist and R. Alton Gilbert is an assistant vice president at the Federal Reserve Bank of St. Louis. Laura A. Prives provided research assistance. This article is excerpted from the December 1985 issue of the *Federal Reserve Bank of St. Louis Review*.

BUSINESS IN NEBRASKA

PREPARED BY BUREAU OF BUSINESS RESEARCH

Member Association for University Business & Economic Research

Business in Nebraska is issued monthly as a public service and mailed free within the State upon request to 200 CBA, University of Nebraska-Lincoln, Lincoln, NE 68588-0406. Material herein may be reproduced with proper credit.

Address correction requested.

April 1986 Vol. 41 No. 499

BUREAU OF BUSINESS RESEARCH

UNIVERSITY OF NEBRASKA-LINCOLN
Martin A. Messersmith, Chancellor
COLLEGE OF BUSINESS ADMINISTRATION
Gary Schaeferman, Dean

Donald E. Pursell, Director
Charles L. Bare, Research Associate
Jerome A. Deichert, Research Associate
Douglas O. Love, Research Associate
Margo Young, Editorial Assistant

The University of Nebraska-Lincoln does not discriminate in its academic admission or employment programs and abides by all federal regulations pertaining to same.

Non-Profit Org.

U.S. Postage

PAID

Lincoln, Nebraska

Permit No. 46

CONGRESSIONAL INFO SERVICE 270238

* SRI

BR

* 4520 EAST-WEST HWY

* BETHESDA, MD 20814